

892
No. 12,982.

IN THE

United States Court of Appeals

FOR THE NINTH CIRCUIT

SIGNAL MANUFACTURING COMPANY, a corporation, and
CHARLES SCHNEIDER, d.b.a., SIGNAL MANUFACTURING
COMPANY,

Appellants,

vs.

THE KILGORE MANUFACTURING COMPANY, a corporation,
Appellee.

BRIEF FOR APPELLEE.

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BRIEF FOR APPELLEE.

Statement of Case, Controverting in Part Appellants' "Brief Statement of Case."

Except for the first two paragraphs in the first part of paragraph 3 of appellants' "Brief Statement of the Case," the remainder thereof is so interspersed with arguments, which are not supported by the record, that the facts are not discernible, even to the extent of accusing the Trial Court of being confused.

Prints of the patented distress signal, the commercially successful signal of appellee, and appellants' signal are appended hereto.

Appellants consistently tried to confuse the issue. The issue is *not* "Is it invention to substitute a one-piece con-

tainer for a two-piece container in an old combination?" What the evidence shows is that "a better result than anything previously known to the art," was produced by a new combination of elements, one of which was the one-piece projectile shell having relatively thin side walls and a thick base, in combination with other old elements, which effected the better result.

The structure of the patent in suit answered a long felt need for the saving of lives of occupants of life boats. *The problem was to project a flare and parachute from a life boat to such height that the flare could be seen from a distance of twenty-five miles or more.* The flare must burn at least long enough to attract attention. Thirty seconds was deemed the minimum burning time. The brilliancy must be such to attract attention in the day time as well as at night. A 20,000 candle power flare was deemed the minimum requirement. [F-29, p. G-10; R. 219.] Obviously then considerable flare material was necessary and the parachute had to be sufficiently large to permit slow descent of the flare. The equipment for projecting the flare and parachute included a hand-held pistol. When such hand-held pistol is used, the weight of the projectile, including the parachute and flare, must be limited, otherwise the recoil could not be withstood by the operator, due to the explosion of the powder to lift the projectile 150 feet or more.

Plaintiff-appellee always maintained, as held by the Court in the above quoted matter, that the patent in suit is directed to a combination of elements which produced a new, long sought result. The Trial Court so understood and was not confused [R. 337]:

"The Court: We get down to this patent in suit, and the plaintiff claims a combination of entirely

old elements in a way so as to produce a new result. Let's take it from the basis of the combination described in their claims 8, 10 and 11, which Mr. Schmieding mentioned this morning. Let me put it this way: *the combination appears to be useful and new as a combination in this field. . . .*" (Emphasis ours.)

The evidence shows as the Court stated in his decision [R. 149]:

" . . . It seems clear to me that the inventors have devised something new and useful in this relatively crowded but apparently a slowly developing field. They have produced *a new combination of old elements which together produce a better result than anything previously known to the art.*

"I find that the combination is not only new and useful, but it embodies invention. I am unable to distinguish this situation here from the Ray-O-Vac case in 321 US Reports." (Emphasis ours.)

Thereafter the Court, with respect to claims 10 and 11 on appeal stated [R. 149]:

" . . . I find the combinations there described are new and useful and embody invention, and that those claims are valid and infringed by the accused device here, Plaintiff's Exhibit 2."

The Trial Court, who heard the testimony, who examined the patent in suit, and the prior art, found no admissions by plaintiff-appellee that the invention lay

in making the bottom of the case or shell integral with the side walls or that the combination of elements was not new, but to the contrary found that these elements produce a better result.

Summary of Argument.

The Trial Court properly held, by a decision at the end of the trial, that claims 10 and 11 of the patent in suit were valid and infringed, and that said claims describe the combination and all essential elements of it with sufficient specificity. *Upon rehearing*, approximately two months later, *he again came to the same conclusions.*

Appellants' signal flare is a Chinese copy of the patent in suit and appellee's flare, the latter having proved commercially successful.

Claims 10 and 11 define a combination of old elements that produce a new and long sought result. Appellee has always maintained that position.

Appellants have tried consistently to confuse the issue by injecting a conjured doctrine that, at least one new element, of a new combination of elements that produces a new result, must be present. We have followed the old and subsisting doctrine that patentability is present in a combination of old elements which produce a new and long sought result, particularly when the product is commercially successful. We have cited decisions supporting this doctrine.

The Utility of Patented Structure.

Mr. Hubbard, Vice-President of Kilgore and who had charge of development, manufacture and sale of products sold by International Flare Signal Company, a division of Kilgore, testified that plaintiff manufactured a flare like Exhibit 5, starting in 1934. To the best of his recollection, no essential changes were made. He also stated that the plaintiff paid royalties to Driggs and Faber under Patent No. 1947834, the patent in suit [R. 91]. Hundreds of thousands of them were sold to the United States Coast Guard, ship operators and ship chandlers through the country [R. 92]. He testified to utility as follows [R. 255]:

“A. Well, prior to the time that this aerial signal was developed by us—

Q. ‘This aerial signal’ Exhibit 5? A. This Exhibit 5. The only thing that was a prescribed requirement for life boats, life rafts, was a hand signal, 2-minute hand signal that ignited from a scratcher cap. You would hold it in your hand; it would burn two minutes at whatever level the holder was. By reason of the fact that the natural curve of the earth would block out that signal, a visibility at a distance of three to five miles, its efficiency from the standpoint of being a signaling device was naturally very limited. After we had in collaboration with the Coast Guard developed different types of aerial signals and flares for their use, we thought that there might be a market for a signal of this type, Exhibit 5, commercially, for life boat and life raft use. Before we could do anything toward the commercial exploitation of the item however, it was necessary to receive the approval of the governing body, which at that time was the Bureau of Marine Inspection and

Navigation of the United States Department of Commerce, who controlled all items that went on to boats, life rafts, life boats, life preservers, anything that went on in the commercial steamship operations. Naturally the commercial steamship operators were not going to use anything that was not approved by the governing body, the Bureau of Marine Inspection and Navigation. In the first place they were not allowed to.

We had to prove to the Bureau of Marine Inspection and Navigation that our item possessed merit far above what they had already approved as equipment for life boats and life rafts. We were able to do so by reason of tests they put on in New York Harbor on several different occasions, out of Baltimore, where we had the Supervising Board for demonstrations, and I think we went on Coast Guard cutters and we proved visibility from 26 to 30 miles away as compared with the previous limited visibility of from three to five miles. I think that was about the figure. After which, and after much wrangling with them, they made a mandatory requirement that all boats and life rafts of ships under the American Registry should be equipped with an approved type of pistol and signal flare of this kind.

Q. 'This kind' is that Exhibit 5, you mean? A. Yes. There were certain functional characteristics prescribed at the time. I don't say that no other signal made differently wouldn't receive approval. In fact there were others received approval subsequent to our pioneering the market on the thing" [R. 257].

. . .

"Q. A hand-type of signal which was lit in very much the same way that you'd light a Roman candle or a burning stick? A. No; it was a scratcher type. There was a cap on the end that by removing a strip

of cloth you exposed a scratcher on this cap that went over the end of the signal. By reversing that cap and scratching across the prime head of the signal, you could ignite it. You would hold it in the hand.

Q. Then it would burn like a torch? A. That is right" [R. 259]. . . .

"Q. But it would not eject any signal to any height? A. That is correct. There were signals manufactured at that time, prior to that time, that could be projected, but *not the parachute type of signal*. In World War I there was what they called the Very Pistol; you shoot a star in the air.

Q. You are familiar with the Very Pistol and the star shells? A. Star shells were not pistol operated.

Q. It is your contention that there were no parachute type flares prior to the invention allegedly made by Driggs and Faber in the patent in suit? A. No; I don't say that, but they had never been offered commercially. There were parachute signals made prior to that time of a sort.

Q. They were not in commercial use? A. That is correct" [R. 260]. (Emphasis ours.)

From this testimony it is evident that a signal flare, constructed as taught by the patent in suit [Ex. 5] was the first practical signal flare for life boats that could be shot from a hand-held pistol. There cannot be any question as to the utility of this device over the previous torch having a limited visibility of from 3 to 5 miles.

Exhibit 5 was known as a "No. 52 signal" [R. 91]. Mr. Hatch, sales manager of International Flare Signal Division of Kilgore, read a list of names of companies taken from Kilgore's shipping record, showing to whom

No. 52 flares had been shipped during 1944, 1945 and 1946 [R. 269-272]. He testified that approximately seventy-two thousand (72,000) flares were sold in 1944 and 1945 and approximately two thousand were sold in 1946 [R. 104].

The unrefuted testimony of Dr. Clauser, who is an expert and was an expert in explosive and pyrotechnics during and since World War I [R. 287], shows that the *instant patented structure solved a problem that puzzled the industry including Dr. Clauser, for decades*. Dr. Clauser testified [R. 115]:

“Q. (By Mr. Schmieding): Dr. Clauser, could you tell us the advantages, if any, of a projectile made of a one piece of drawn metal such as that shown in the patent?

* * * * *

A. That is one of the things that has puzzled the other fellow for a number of years. That included myself. . . . It is that part of the flare which is projected into the air at 150 feet or more, and it is projected with powder. . . . That one piece there, it is definitely the most fool-proof mechanical structure that we know of at this time, . . . If that spit (fire) of that expelling charge (in the cartridge case) gets by the delay (fuse) or by the base, if it is a two-piece projectile, it will be premature (meaning premature ignition of the expelling charge in the projectile shell) and the whole business will explode right over your head and fall back on your body or in the boat and you have no signal. That is, it is exceedingly difficult to handle that, and, as a one-piece construction, over my years of experience I find definitely that, regardless, to be the very best construction for that purpose.”

Dr. Clauser asserted the value of a projectile shell having a *thin side wall* and an *integral base of thicker material*, i. e., a light weight projectile shell that withstands the force of the explosion of the propelling charge in the cartridge case and the explosion of the expelling charge in the projectile shell.

In this connection Dr. Clauser testified as follows [R. 117, R. 294]:

“Q. Has that integral projectile any advantage with respect to the black powder 6? And that also explodes, does it not, to eject the candle and the parachute? A. Oh, yes.

Q. Does that integral structure have any advantage in that respect? A. Oh, definitely.

Q. Will you explain that to the court, please?” [R. 117].

A. I have already pointed out that because of its construction, that is, the projectile being lodged into that there cartridge case, wedged in there, and just as soon as that priming cap, igniting cap . . . more correctly called a percussion cap—functions, the powder explodes, and the moment of its explosion or what we call the initial impulse is terrific until something occurs, until more space, until you get more volume, until you get the equivalent of a chamber in there. So because of that terrific pressure, it is directly under that delay, properly called a fuse, that takes a beating there and unless that is properly located there and properly anchored, why, that terrific pressure can blow right through the delay and cause a premature that way by blowing the delay right into the powder of the explosion charge.

The Court: What ignites the black powder in the projectile?

The Witness: In the projectile the black powder, the delay, sir.

The Court: With a fuse, the black powder?

The Witness: Yes, a fuse or delay—”

Dr. Clauser gave further testimony as to the value of the one-piece projectile shell over the two-piece type as follows [R. 138, R. 309]:

“Q. (By Mr. Miketta): Irrespective of what material we are using, Dr. Clauser, if we had a projectile shell in the form of a metallic tube, and you attached a separate bottom on that tube, either by screwing it on or welding it on, as long as you made sure that you had a tight joint between that bottom and the walls of that projectile shell, wouldn't that answer the requirements and prevent flash? A. It would as long as you get it to the point where you get it absolutely tight. [R. 309.] *But that is the fly in the ointment.* It is so difficult to do. That is where you get into trouble. When you put another piece on there, you must screw it in, as you say, have thread on there, and it is a fact that that is done with difficulty. If you want to use a glue or an adhesive, why, that over a period of time will dry, and as it dries it contracts. If you use tar and put it on there, these signals are thrown into the holds of a ship, or one side of an engine in a plane, and they are stored in hot climates and your tar will melt. It just does not take the place of that bottom there which comes as a result of that one piece of construction. I have stubbed my toes on that all my life.”

And in [R. 312], Dr. Clauser testified as follows:

“Q. If you use screw threads, Doctor, or if you would weld a base to the projectile, would that in-

crease the weight of the projectile shell? A. It will increase the weight, yes, sir.

Q. Why would it increase the weight of the projectile? A. Because of the fact that you must have material, you must have stock at the bottom there that has more surface on the sides so as to get your threads on there, and if you get more stock on there it would increase the weight." (Emphasis ours.)

Further with respect as to what was done commercially before the advent of the present invention, may be summed up as follows [R. 301]:

"Q. By Mr. Miketta: But is it not a fact and do not the publications actually show, Dr. Clauser, that parachute type flares were shot from the Very and Webley-Scott pistols to heights of 200 to 400 feet? A. A Very star parachutes?

Q. I am talking about parachute types. A. No, sir. I have never come across that, not with a parachute, no, sir.

Q. Do you doubt that they were shot that high? A. If they were shot, I would be surprised if you would also tell me that many of them did not work very well, *because that was the headache. That is why we were called upon for something to take its place. That was all the trouble of the Army. It was then Army Materiel, and I recall after World War I there was a million dollars worth of that materiel that was dumped into the Atlantic Ocean because of its failure to function.*" (Emphasis ours.)

The signal shell there employed in the Very and Webley-Scott pistols used a two-piece projectile shell as shown in Exhibit F-27.

Thus the instant patent discloses the first fool-proof signal flare for life boats. *The prior two-piece shells were, of necessity, heavier and required more propelling charge in the cartridge cases to lift them to the desired height, which, of necessity, took such signals out of the class of those that could be fired from a hand-held pistol because of the terrific recoil of the explosion of the propelling charge.* This invention then “produced a new combination of old elements which together produce a better result than anything previously known to the art”.

A Patent Is Presumed to Be Valid by Reason of Its Grant by the Patent Office and the Defendant Has a Heavy Burden of Proof to Show Invalidity for Lack of Invention.

In the case of *Williams Mfg. Co. v. United Shoe Mach. Corp.*, 121 F. 2d 273, (C. C. A. 6, June 27, 1941) (affirmed 316 U. S. 364), the Court of Appeals at 277 stated:

“The appellant urges the first McFeely patent as complete anticipation of the claims of the patent in suit. It is without doubt its most pertinent reference. But the first McFeely patent was before the Patent Office for consideration on the second application and there is no indication that McFeely experienced unusual difficulties in the pursuit of the patent in issue. We are, therefore, obliged to give consideration to the rule that ‘one otherwise as infringer who assails the validity of a patent fair upon its face bears a heavy burden of persuasion, and fails unless his evidence has more than a dubious preponderance. Cf., *Philippine Sugar E. D. Co. v. Philippine Islands*, 247 U. S. 385, 391, 38 S. Ct. 513, 62 L. Ed. 1177.’ *Radio Corporation v. Radio Laboratories*, 293

U. S. 1, 8, 55 S. Ct. 928, 931, 79 L. Ed. 163. To the presumption of validity that attaches to a granted patent, where the most pertinent prior art has been cited against it in the patent office, there must probably now be added the force of a growing recognition of finality that is generally being accorded to administrative determinations supported by evidence, on the ground that the administrative agency is expected to have developed an expertness in its specific field beyond what may be expected from the courts wherein adjudications range the whole field of human controversies. It is true, of course, that in the most strict sense, the granting of a patent is not, except when an interference is declared, the result of an adversary proceeding, as in usual administrative determinations of agencies exercising quasi-judicial functions. Nevertheless, it wears, in the broader sense, an adversary aspect, since patent office examination protects the public against unmerited monopoly, and so the public, as represented by the examiner is always impliedly in adversary position to the application just as it is ever a third party to an infringement suit.”

In *Ralph N. Brodie Co., et al. v. Hydraulic Press Mfg. Co.*, 151 F. 2d 91 (C. C. A. 9., Aug. 29, 1945), Your Honors held at 94:

“Both patents were regularly issued. Hence both patents and all claims thereof were presumptively valid. Hence the burden of establishing the invalidity of claims 7, 9, 10, 11, 14 and 15 of patent No. 2,067,265 and claims 7, 8, 9 and 10 of patent No. 2,136,240 rested on appellants.

“All these claims were for combinations. Appellants alleged, in substance and effect, that these combinations were not new, and that therefore the claims

were invalid for lack of novelty. The question thus presented was one of fact. On this question, appellants had the burden of proof.

“Appellants alleged, in substance and effect, that the combinations did not involve invention, but were merely the product of ordinary skill, and that therefore the claims were invalid for lack of invention. The question thus presented was one of fact. On this question, appellants had the burden of proof.

“On both questions—the question of novelty and the question of invention—the evidence was conflicting. Resolving the conflicts in favor of appellee, the court found that the combinations were new, that they involved invention, and that therefore the claims were not invalid for lack of novelty or for lack of invention. These findings are supported by substantial evidence, are not clearly erroneous and should not be set aside.”

Where Patentee Solves a Problem Which Has Long Faced an Art, It Is Evidence of Invention.

In *Goodyear Tire & Rubber Co., Inc., et al. v. Ray-O-Vac Co.*, 321 U. S. 275, 64 S. Ct. 593, the Supreme Court on February 28, 1944 at 594 stated:

“Viewed after the event, the means Anthony adopted seem simple and such as should have been obvious to those who worked in the field, but this is not enough to negative invention. During a period of half a century, in which the use of flash light batteries increased enormously, and the manufacturers of flash light cells were conscious of the defects in them, no one devised a method of curing such defects. Once the method was discovered it commended itself to the public as evidenced by marked

commercial success. These factors were entitled to weight in determining whether the improvement amounted to invention and should, in a close case, tip the scales in favor of patentability. Accepting, as we do, the findings below, we hold the patent valid and infringed."

In *Webster Loom Co. v. Elias S. Higgins*, 105 U. S. 580, Justice Bradley speaking for the Supreme Court stated at 599:

"At this point we are constrained to say that we cannot yield our assent to the argument, that the combination of the different parts or elements for attaining the objects in view was so obvious as to merit no title of invention. Now that it has succeeded, it may seem very plain to anyone, that he could have done as well. This is often the case of inventions of the greatest merit. It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result, never attained before it is evidence of invention."

In the case of *Diamond Rubber Co. of New York v. Consolidated Rubber Co.*, 220 U. S. 428, Justice McKenna speaking for the Supreme Court at 444 stated:

"Many things, and the patent law abounds in illustrations, seem obvious after they have been done, and, in the light of the accomplished result, it is often a matter of wonder how they so long eluded the search of the discoverer and set at defiance the speculations of the inventive genius. Knowledge after the event is always easy, and problems once solved present no difficulties, indeed, may be repre-

sented as never having had any, and expert witnesses may be brought forward to show that the new thing which seemed to have eluded the search of the world was always ready at hand and easy to be seen by a merely skillful attention. But the law has other tests of the invention other than subtle conjunctures of what might have been seen and yet was not. It regards a change as evidence of novelty, the acceptance and utility of change as a further evidence, even as demonstration."

From the above quoted testimony of Dr. Clauser and Mr. Hubbard, it is evident that the demand for a hand-held, pistol projected, fool-proof signal flare, preceded by years the invention taught in the instant application. The demand for a signal flare, which could be visible from great distance, existed since pyrotechnics were known. *Prior to the advent of the present invention, the lives of shipwrecked people depended on whether or not a rescue ship was within a few miles of the life boat,* since prior to the advent of the present invention the distress signal consisted of a hand-held torch. By the universal adoption of the invention of the patent in suit, the chances of finding the lifeboat, in the large open sea, were multifoldedly increased. The inventive thought of using a one-piece projectile shell, in combination with the other elements, turned the former failures into success.

The Supreme Court in *The Barbed Wire Patent* case, 143 U. S. 275, 282, 36 L. Ed. 154, 158, said:

"Under such circumstances courts have not been reluctant to sustain a patent to the man who has taken the final step which has turned a failure into a success. *In the law of patents it is the last step*

that wins. It may be strange that, considering the important results obtained by Kelly in his patent, it did not occur to him to substitute a coiled wire in place of the diamond shape prong, but evidently it did not; and to the man to whom it did ought not to be denied the quality of inventor. There are many instances in the reported decisions of this court where a monopoly has been sustained in favor of the last of a series of inventors, all of whom were groping to attain a certain result, which only the last one of the number seemed able to grasp. * * * It may be laid down as a general rule, though perhaps not an invariable one, that *if a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention.*" (Emphasis ours.)

We have always maintained that the inventors reconstructed a new combination which produced a new and beneficial result, never attained before. The substitution of a one-piece projectile shell, that is, a projectile shell in which the relatively thin side walls and the relatively thick base, being formed of one piece of metal, reduced to the very minimum any possibility of pre-ignition of that powder charge therein which is later used to eject the flare and the parachute from the shell, after the projectile reaches the zenith of its flight. The last step that changed the old unsuccessful distress signal to a successful one. As stated in *The Barbed Wire Patent* case (*supra*), "In the law of patents it is the last step that wins".

This doctrine of "In the law of patents it is the last step that wins" has been consistently followed by this court. One of the recent decisions by this court on this point is *Pointer d. b. a. Pointer Willamette Co. v. Six*

Wheel Corporation, Case No. 12,146, decided September 27, 1949, 177 F. 2d 153 (C. C. A. 9), in which Your Honors stated:

“A test which has been found very useful and generally followed is that adverted to by Mr. Chief Justice Taft in the case just referred, . . . namely, the discovery of the source of the difficulty and the application of a remedy not thought of before.”

Citing decisions among which is *Johnson Co. v. Philad Co.* (1938) (C. C. A. 9), 96 F. 2d 442, 444, your Honors went on to say:

“By the same token, *invention cannot be defeated merely by showing that, in one form or another, each element was known or used before.* . . . (citing decisions). (Emphasis ours.)

“The question is: Did anyone before think of combining them in this manner in order to achieve the particular unitary result, . . . a new function? *If not, there is invention.* . . .” (Citing decisions.) (Emphasis ours.)

The art, except other patents of Driggs and Faber, introduced by appellant in the instant case was “paper” art. As stated in the *Pointer v. Six Wheel Corporation* case (*Supra*):

“The art, it should be observed, is chiefly ‘paper’ art. No structure constructed according to the teachings of any of the claimed prior art was introduced in evidence. . . .

“. . . and the inferences which the judge was free to draw from this testimony, as it related to entire problem, he was warranted in concluding that the Knox patent was invention over the prior art, was a deviation from it which achieved a new result.”

This Court then cited the language of Judge Learned Hand in the case of *Safety Car Heating & Lighting Co. v. General Electric Co.* (1946) (C. C. A. 2), 155 F. 2d 937, 939:

“Courts made up by laymen as they must be, are likely to either underrate, or to overrate, the difficulties in making new and profitable discoveries in fields with which they cannot be familiar; and, so far as it is available, they had best appraise the originality involved by the circumstances which preceded, attended and succeeded the appearance of the invention. Among these will figure the length of time the art, though needing the invention, went without it: the number of those who sought to meet the need, and the period over which their efforts were spread; how many, if any, come upon it at about the same time, whether before or after; and—perhaps most important of all—the extent to which it superseded what had gone before.”

In the decision of this Court *The Johnson Co., Inc. v. Philad Co., et al.* (*supra*), this Ninth Circuit Court states:

“The evidence shows that the Mayer process solved the problem confronting hair dressers by providing a practical method of applying a permanent Croquignole wave to the human head. As we have said, the essence of the invention was applying clamps to the hair before winding. Although this step was simple, it apparently was not obvious to those skilled in the art of hair dressing and the introduction of the patented method met with immediate and substantial commercial success. Solving such a problem in a practical manner constitutes invention. See *The Craftint Mfg. Co. v. Baker*,

No. 8371, decided by this court January 10, 1938, 94 F. 2d 369 (36 U. S. P. Q. 164); General Electric Co. v. Wabash Appliance Corp. (C. C. A. 2), 93 F. 2d 671 (36 U. S. P. Q. 214)."

The Trial Court found [R. 67]:

"9. The inventors of patent No. 1,947,834 in suit devised something new and useful. They produced a new combination of old elements which together produced a better result than anything previously known to the art.

"10. The subject matter of the patent in suit is in a crowded field. It answered a long-existing need which had not been answered by the prior art, and met with commercial success.

"11. Prior to the advent of the invention in suit, no one had devised a metallic projectile shell which would meet the need of lift to an effective elevation, carrying a flare of high candle power which would burn for a relatively long period of time, and be reasonably certain to function at the approximate zenith of its upward flight without premature ignition of the expelling charge therein.

"12. Signal parachute flares made in accordance with the teachings of the patent in suit were the first successful distress signals that could be fired from a hand-held pistol and could be seen from a distance of twenty-five to thirty miles when shot by an occupant of a lifeboat.

"13. The patentees were the original and first inventors of invention of the patent in suit, as defined by claims 10 and 11 here in issue. The invention defined by claims 10 and 11 is directed to a combination that is not only new and useful, but embodies invention and constitutes patentable subject matter."

Appellants paid tribute to the patent in suit by making a Chinese copy of the patented structure.

Appellants' arguments are no answer to the facts found by the Trial Court.

In the case of *Ralph N. Brodie Co. et al. v. Hydraulic Press Mfg. Co. (supra)*, Your Honors held:

"On both questions—the question of novelty and the question of invention—the evidence was conflicting. Resolving the conflicts in favor of appellee, the Court found that the combinations were new, that they involved invention, and therefore the claims were not invalid for lack of novelty or for lack of invention. These findings are supported by substantial evidence, are not clearly erroneous and should not be set aside."

Attention is directed to a decision of this Court in *Payne Furnace and Supply Co., Inc. v. Williams-Wallace Co.*, 117 F. 2d 823 (C. C. A. 9), wherein the invention under consideration comprised a flue pipe including an outer tube with insulation around the inside surface of the tube and an inner tube slidably located inside the insulating material. Telescoping pipes were old in the art and the use of insulation between pipes was also disclosed in the prior art cited. The Court there stated:

"The flue pipe is old, yet has its problems; and it would seem that Stadtfeld's combination has overcome a number of important difficulties in this field. His pipe, as the Trial Court found, has gone into wide and successful use in the building industry. Appellant, with Stadtfeld's work before it, has manufactured and put on the market an exact copy, . . ."

Appellant in that case endeavored to excuse its infringement in citing prior art which showed each of the elements to be old. The Court went on to say:

“Stadtfeld’s improvement occurred within the confines of an ancient art. Its immediate and wide commercial adoption is powerful evidence of invention as contrasted with the exercise of mere mechanical ingenuity. Compare *Paramount Publix Corporation v. American Tri-Ergon Corporation*, 294 U. S. 464, 474 (24 U. S. P. Q. 303, 307). The patent is entitled to the presumption of validity; and the citations to the prior art fail to overcome the presumption.”

In the case of *Goodyear Tire and Rubber Co. Inc., et al. v. Ray-O-Vac Co.*, 321 U. S. 275, the Supreme Court had before it, the question of whether invention was involved in encasing the well known flashlight dry cell in a well known metallic shell. From the decision of the Trial Court in *Ray-O-Vac Company v. Goodyear Tire and Rubber Company et al.*, 45 Fed. Supp. 927, it will be seen that all of the elements of the combinations claimed in the patent under consideration, were old in the same art including the metallic casing for the dry cell. All that the patentee did in that case was to crimp the upper and lower edges of the cylindrical sheet against the top and bottom of the conventional flashlight dry cell so as to prevent leakage of the electrolyte from the dry cell. Crimping to prevent leaks obviously was old.

No one prior to appellee utilized a one-piece shell for containing a parachute flare type distress signal, and as stated by the Trial Court in the *Ray-O-Vac v. Goodyear* case:

“This was his idea, a new and useful one satisfying a long felt want, followed by commercial success, a striking example of which is the acceptance of plaintiff’s battery in competitive bidding by the United States Signal Corps, where long life of the battery in the field is highly desirable. *Was this merely perfection of workmanship or was it to that impalpable intangible quality constituting invention?* While not all improvement is invention, yet every immediate step in advance which rises to the dignity of creation is entitled to protection and it may result from long careful consideration as well as from a flash of thought. *Does it spring from that intuitive faculty of the mind put forth for new results, yielding what had not before existed or bringing to life what had previously lay hidden from vision?* *Hollister v. Benedict Mfg. Co.*, 113 U. S. 59, line 72. Or, if not the product of the intuitive faculty of the mind resulting from a single brilliant event, does it arise from an inventive faculty which has thoughtfully conserved and correlated the causes and effects of movements and mechanisms which enter into a desired result? Obviously, the ideal line which separates invention from things otherwise produced can never be concisely or specifically defined. Every patent must be considered on its own merits. We must not grant to a single party a monopoly for every slight advance in the art. We must attribute invention only to such achievements as contribute substantial discoveries making novel and useful steps in advance in useful art. *If a particular result has been long desired and frequently sought but*

never attained, ordinarily we may not attribute lack of invention to the device which first achieved the desired result, because it seems that the simplicity of the means is so marked that many believe that they could readily have produced it if required. Barbed Wire Patent, 143 U. S. 275, 284. Though the device be simple, and it may seem strange that earlier makers should have failed to take the final step needed to convert their experiments into assured success, the simplicity will not preclude invention. Carnegie Steel Co. v. Cambria Iron Co., 185 U. S. 403; LOOM Co. v. Higgins, 105 U. S. 580; Diamond Rubber Co. v. Consolidated Rubber Tire Co., 220 U. S. 428.” (Emphasis ours.)

This logical statement of a simple invention was affirmed by the Court of Appeals and by the Supreme Court of the United States. The language employed by the Trial Court and the United States Supreme Court is applicable *in toto* in the instant case. *Obviously, it is far more important for the development of a distress signal which was long needed for the saving of lives than the development of a dry cell for an inexpensive flashlight.*

Whether metal sheaths for dry cells are old or new or whether one-piece projectiles are old or new is immaterial. Like in the *Ray-O-Vac* case the patentees in the instant case, are not claiming a new element *per se* but are claiming a one-piece projectile in combination with other elements which go to make up the first successful parachute type distress signal for life boats.

With Respect to the Prior Art.

Appellants' Exhibit F-XIV was before the Patent Office and considered by the Patent Office as being non-anticipatory to the invention defined in claims 10 and 11 of the patent in suit. Attention is directed to the fact that this patent does not include a parachute and means to prevent the collapsing of the parachute; it is not a distress signal; it is merely "paper" art (*Pointer v. Six Wheel Corp.*). No structure, constructed according to the teachings of Exhibit F-XIV, was introduced in evidence; it was not such a structure that could be projected a substantial distance in the air. The patentee [Ex. F-XIV] states on page 1, column 2, line 96 "The propelling charge itself is *sufficient only* to expel the shell from the discharger and forces the cap off the shell, . . ." It is used in connection with an aircraft (p. 1, column 2, line 92) and is dropped from the aircraft. The propelling charge in the projectile shell is ignited "when the shell has *fallen* an appreciable distance" (p. 2, column 1, line 34). (Emphasis ours.)

Exhibit F-XVIII is not a one-piece projectile shell. Dr. Clauser testified as follows [R. 327-R. 141]:

"Dr. Clauser, I call your attention to Defendants' Exhibit F-18, which is the Driggs, *et al.* patent, No. 1,776,755. Does that patent disclose a one-piece projectile shell having an integral base and side walls?
A. That does not. That is not a one-piece shell. That is not a one-piece projectile case. There is a stem to that, it is a larger flare and there is a stem at the bottom of about two inches with reduced size.

The Court: Is that stem an integral part of the walls of the case or the base?

The Witness: It is not. That cannot be drawn as such, as it is here, today. That cannot be drawn, and it is a two-piece structure and it is connected, that stem is connected, Your Honor, that is, structurally connected, mechanically connected, to that projectile case, and that larger bore extension. A construction like that, if I am repeating I apologize, cannot be drawn successfully today out of aluminum.

Q. By Mr. Schmieding: Did Kilgore Manufacturing Company ever manufacture a flare such as depicted by Plaintiff's Exhibit F-18? That is Driggs patent No. 1,776,755. A. Yes. I want to add this for the Court's pleasure: It is an aerial shell, this is not a shell that is intended to be shot from the ground into space, like Mr. Miketta says, it can be shot up in the air. It is just the reverse. It is shot down. It is shot out from a plane. This is an aerial signal. It can be shot from the ground, but is not intended for that. We have to answer the question specifically. The United States Army, in the Aviation of the United States Army that is one of the shells that they buy, and we have manufactured them for them for years, and during the war, and I should like to point out that the purpose of this shell is for reconnoitering purposes, it is for landing before they liberate the big flare. This flare here, Your Honor, will burn for a whole minute. It has a terrific light intensity, and approaches 100,000 candlepower. It is to use primarily for the scouting planes to locate a terrain on which it will be possible to land, and then they put out larger flares.

The Court: Is this projectile case made of cardboard, fibre of some kind?

The Witness: The flare case is made out of cardboard, the projectile case is made out of aluminum, sir.

Q. By Mr. Schmieding: At any time did Kilgore manufacture that particular flare to which you are testifying out of one piece of drawn aluminum? A. No, sir. They are connected. The cartridge case at the bottom is one piece, which corresponds to the cartridge case in the other items, but this is definitely two-piece construction, the projectile case.

Q. Dr. Clauser, I wish to call your attention—

The Witness: Pardon me. In the patent—

The Court: Which patent?

The Witness: Patent 1,776,755, Driggs, Jr., *et al.*

The Court: Exhibit F-18 here.

The Witness: I don't have the exhibit number on mine.

The Court: Very well. What were you about to say?

The Witness: I want to point attention, in support of my statement, to paragraph 3, where it refers to 'this container B has reduced hollow stem b'—

The Court: That is in the second column, beginning at line 62?

The Witness: Beginning line 62. As you will read, you will find when you get to 65 it says, 'Connected to the stem b by the annular shoulder * * *.' It says 'connected'."

The structure shown in Exhibit XVIII was never intended as a parachute type of distress signal which could be shot into the air a substantial distance, and in confirming Dr. Clauser's descriptions of the device and the functions thereof, attention is directed to page 2 of that patent, column 1, line 39 in which it is stated "In the operation of the device, the initial velocity of the container B (projectile shell), after leaving the gun, will be comparatively small, * * *."

Dr. Clauser testified on cross examination as follows [R. 311]:

"Q. Dr. Clauser, prior to 1929 you have seen metallic shells made—I am just talking about metallic tubular shells—made of one piece of metal where the bottom and the side walls were all one piece of metal, have you not? A. Not unless you are talking about cartridge cases. Only in cartridge cases."

And in [R. 302]:

"Q. By Mr. Miketta: Is it not a fact, Dr. Clauser, that back in 1929 people had described the use of a one-piece projectile shell or case, and I am not talking about the patent in suit? A. It refers to one-piece cartridge cases, but I have never run across any of the literature where it has referred to other—you say don't it refer—I have never come across any literature or in my experience where a one-piece projectile case was used at that time, not of that diameter, 37 millimeter."

Law Relating to the Inventions in Which New or Better Results are Obtained by an Integral or One-Piece Shell.

While the claims under consideration in the instant case are drawn to a combination of elements, appellants stress the point throughout their brief that there is no invention in substituting a one-piece element for a two-piece element, citing certain decisions, in each of which the function of the machine or apparatus is *not* changed by the substitution of a one-piece element for a two-piece element.

The law that applies in the instant case is found in the following, wherein, like here, a new result is achieved:

In the case of *Canda v. Michigan Iron Co.*, 124 Fed. 486 (C. C. A. 6), the validity of claim 1 was questioned. That claim read as follows:

“(1) In a drawbar attachment for railroad cars, a spring casing formed integrally with a single casting having a closed top and an open bottom and constructed for attachment to the longitudinal draft timbers, substantially as herein shown and described.

* * * While it is true that there is no invention in making into one whole that which was before in the same form, but in detachable parts, when there is no further consequence, *yet it is also true that, if such change produces a more useful result, there may be a quality of invention in making it.*” (Emphasis ours.)

Canda v. Michigan Iron Co. (*supra*) was followed in *In re Otto et al.*, 121 F. 2d 553, and in *Application of Hubbell*, 164 F. 2d 700. These two cases cite also *Krementz v. S. Cottle Co.*, 148 U. S. 556 at 559, 13

S. Ct. 719 at 720, 37 L. Ed. 558, wherein the Supreme Court stated:

“In the present instance, however, we find a new and useful article, with obvious advantages over previous structures of the kind. A button formed from a single sheet of metal, free from sutures, of a convenient shape, and uniting strength with lightness, would seem to come fairly within the meaning of the patent laws.”

In the *Otto* and *Hubbell* cases (*supra*), the claims in issue were each drawn to a combination of old elements which produce a better result through the employment of an integral element which formerly was made of a plurality of parts. In the *Otto* case, the claim in issue was drawn to a combination of elements which provided an adjustable multiple groove sheave in which discs were bound into a unit. In the *Hubbell* case, the claim was drawn to a furnace including in combination, an outer shell, a base and a one-piece lining member.

The Court in the *Hubbell* case cited *In re Both*, 46 F. 2d 362, wherein the claim then in issue was directed to the combination of an electrical outlet box, an electric device, electric contacts. The sole novelty lay in the face plate including rearwardly extending walls molded in one piece. The Court there stated, page 364:

“* * * None of the references cited by either Examiner or the Board of Appeals seems to incorporate the idea which the applicant has suggested, namely, a device consisting of one part completely insulated, to be used as an electric outlet receptacle. There is much merit in his contention that such a device will be safe, economical, and easy to install. It may be claimed that the McBean reference, inas-

much as it shows a *cementing* of various parts, teaches the art of making a receptacle of one piece, and that applicant's idea is rather that of a process than a device. We are of the opinion, however, that there may be, and probably is, a clear distinction between a device made of one or more parts *cemented* together, and *one which is made as a whole*.

* * * Certainly, no one else, so far as the references disclose, has suggested this idea. * * *

(Emphasis ours.)

Appellants are free to use a two-piece projectile shell since there is no requirement in the General Rules and Regulations for Vessel Inspection [R. 219] or the Coast Guard specification [Ex. 4] that requires that the projectile shell be made of a single piece of metal.

Appellants Infringe.

Appellants do not deny that they employ the combination of (1) a cartridge case having (2) a base, (3) a propelling charge chamber and (4) a fuse mounted therein, said base carrying (5) side walls, (6) a telescopically-arranged shell mounted therein having a relatively heavy integral (7) base and (8) thin side walls, (9) a fuse in the base of said shell communicating with the propelling charge of the cartridge case on one side and with (10) an expelling charge in the shell on the other side, (11) a flare and (12) parachute in said shell, and (13) means to prevent the collapse of said parachute, all as defined in claim 10, and, with the addition as defined in claim 11 and (14) detachable closure means for said shell. Appellants contend that they do not infringe these two claims because they do not employ an annular groove in the base, for holding the cartridge case in the

pistol, but instead use an annular shoulder exactly like that shown in 27a of Fig. 2 of the patent in suit. The shoulder 27a performs exactly the same function as the shoulder formed by the annular groove 28, namely for the purpose of holding the flare within a pistol. The shoulder 27a abuts the rear end of the barrel, as shown in Fig. 10 of the patent in suit, and in the muzzle-loading type of gun, the cartridge case is held in position by a spring pressed nose 30 (Fig. 9) which abuts the shoulders formed by the annular groove 28. Whether the shoulder, as defined by groove 28, for retaining the cartridge case in the barrel of the gun extends inwardly or whether it extends outwardly as at 27a depends entirely upon the gun in which it is to be used. Exhibits F-III, F-IV, F-V, F-VI, F-VII, F-VIII, F-XIV, F-XXI, F-XXII, F-XXIII show breech-loading type of cartridges, and F-XV and F-XVI show muzzle-loading type of cartridges.

Dr. Clauser testified as follows [R. 300]:

“Q. By Mr. Schmieding: Dr. Clauser, will you please refer to the patent again, the patent? Fig. 2 shows a radial flange 27a on the base of the cartridge case and Fig. 4 shows a cartridge case in which there is an annular groove. Do you see that? A. Yes, sir.

Q. Do you know whether or not this is interchangeable practice in the ammunition field, guns?
A. It is, yes, sir.”

The only reason that the appellants and appellee used the outwardly extending shoulder instead of the inwardly extending shoulder, is to meet the government's specification Exhibit F-XXIX, wherein the signal must fit the marine signal pistol, specifications of the latter being

shown in Fig. 1 on page (G-10), the recess for the shoulder being shown by the indicia and arrows 1.665 plus or minus .001. Had the government specified the muzzle-loading type of gun, appellants and appellee would have provided signal shells with an annular groove in the base.

Equivalency.

The Trial Court held that the flange, like the flange 27a of the drawings of the patent, was the mechanical equivalent of the annular groove. In the opening statement, the Trial Court's attention was called to the recent decision of the Supreme Court of *Graver Tank & Mfg. Co. Inc., et al. v. Linde Air Prod. Co.*, 339 U. S. 605, 94 L. Ed. 1097, and the Court stated: "Yes, I am familiar with that decision" [R. 252]. In the dissenting opinion of Justice Douglas he pointed out that "The claims of the patent are limited to a flux 'containing a major proportion of alkaline earth metal silicate.'" He also pointed out that "Manganese silicate, the flux which is held to infringe, is not an alkaline earth metal silicate." He further pointed out that the manganese silicate "was disclosed in the application and then excluded from the claims". In the instant case both forms of shoulders are shown in the drawings and described in the specification. In the *Graver v. Linde* case, the patentee claimed a combination alkaline earth metal. The defendant did not use an alkaline earth metal. The majority Court went on to say "The question which thus emerges is whether the substitution of the manganese which is not an alkaline earth metal for the megnesium which is, under the circumstances of this case, and in view of the technology and the prior art, is a change of such substance as

to make the doctrine of equivalents inapplicable; or conversely, whether under the circumstances the change was so insubstantial that the trial court's invocation of the doctrine of equivalents was justified."

The following quotation from that case is applicable in the instant case:

"But the courts have also recognized that to permit imitation of a patented invention which does not copy every literal detail would be to convert the protection of the patent grant into a hollow and useless thing. Such a limitation would leave room for—indeed encourage—the unscrupulous copyist to make unimportant and insubstantial changes and substitutions in the patent which, though adding nothing, would be enough to take the copied matter outside the claim, and hence outside the reach of law. One who seeks to pirate a copyrighted book or play, may be expected to introduce minor variations to conceal and shelter the piracy. Outright and forthright duplication is a dull and very rare type of infringement. To prohibit no other would place the inventor at the mercy of verbalism and would be subordinating substance to form. It would deprive him of the benefit of his invention and would foster concealment rather than disclosure of inventions, which is one of the primary purposes of the patent system.

"The doctrine of equivalents evolved in response to this experience. The essence of the doctrine is that one may not practice a fraud on a patent. Originating almost a century ago in the case of *Winans v. Denmead* (U. S.), 15 How. 330, 14 L. Ed. 717, it has been consistently applied by this Court and the lower federal courts, and continues today ready and available for utilization when the proper cir-

cumstances for its application arise. 'To temper unsparing logic and prevent an infringer from stealing the benefit of the invention' a patentee may invoke this doctrine to proceed against the producer of a device 'if it performs substantially the same function in substantially the same way to obtain the same result.' *Sanitary Refrigerator Co. v. Winters*, 280 U. S. 30, 42, 74 L. Ed. 147, 156, 50 S. Ct. 9. *The theory on which it is founded is that 'if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape.'* *Union Paper-Bag Machine Co. v. Murphy*, 97 U. S. 120, 125, 24 L. Ed. 935, 936." (Emphasis ours.)

The Court in that case did not limit the doctrine of equivalence to pioneer patents, it stated:

"The doctrine operates not only in favor of the patentee of a pioneer or primary invention, but also for the patentee of a secondary invention consisting of a combination of old ingredients which produce new and useful results. *Imhaeuser v. Buerk*, 101 U. S. 647, 655, 25 L. Ed. 945, although the area of equivalence may vary under the circumstances. See *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U. S. 405, 414, 415, 52 L. Ed. 1122, 1126, 1127, 28 S. Ct. 748, and cases cited; *Seymour v. Osborne* (U. S.), 11 Wall 516, 556, 20 L. Ed. 33, 42; *Gould v. Rees* (U. S.), 15 Wall 187, 192, 21 L. Ed. 39, 40."

What Constitutes Equivalency.

The Court in the *Graver v. Linde* case stated:

“What constitutes equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case. Equivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum. It does not require complete identity for every purpose and in every respect. In determining equivalents, things equal to the same thing may not be equal to each other and, by the same token, things for most purposes different may sometimes be equivalents. Consideration must be given to the purpose for which an ingredient is used in a patent, the qualities it has when combined with the other ingredients, and the function which it is intended to perform. *An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was.* (Emphasis ours.)

“A finding of equivalence is a determination of fact. Proof can be made in any form: through testimony of experts or others versed in the technology; by documents, including texts and treatises; and, of course, by the disclosures of the prior art. Like any other issue of fact, final determination requires a balancing of credibility, persuasiveness and weight of evidence.”

In the instant case the interchangeability of outwardly extending shoulders, inwardly extending shoulders for breech and muzzle-loaded guns respectively is not only shown in the patent in suit but in the patented art, previously referred to.

Trial Court to Decide Question of Equivalency.

The Court in *Graver v. Linde* also stated:

“It (equivalency) is to be decided by the trial court and that court’s decision, under general principles of appellate review, should not be disturbed unless clearly erroneous. . . .

“It is not for this Court to even essay an independent evaluation of this evidence (evidence upon which the court concluded one element was the equivalent of the other). This is the function of the trial court. . . .”

In the *Pointer v. Six Wheel Corp.* case, decided December 27, 1949, 177 F. 2d 153, Your Honors held that the universal rubber joint was the equivalent of a ball and socket universal joint, and held that coil springs were the equivalent of leaf springs and at the end of the decision listed the many cases in support of the finding of the Trial Court on the doctrine of equivalence.

Claims 10 and 11 Are for Complete Combination in Eyes of Law.

The Trial Court, in holding claims 10 and 11 valid, stated [R. 349]:

“Fairly construed I think those claims describe the combination and all the essential elements of it with sufficient specificity to enable anyone versed in the art to practice that invention.”

Appellants argue that the claims are invalid because each and every element is not specifically set out in each claim, yet in another argument they say that the elements and their functions were known to those versed

in the art. The Patent Office in allowing claims 10 and 11 considered that these claims included all the essential elements necessary in order to carry out the function of the parachute flare signal. The law followed by the Trial Court is basic. In the case of *Webster Loom v. Higgins*, 105 U. S. 580, 586, 26 L. Ed. 1177, Mr. Justice Bradley stated:

“ . . . He (the inventor) may begin at the point where his invention begins, and describe what he has made that is new, and what it replaces of the old. *That which is common and well known is as if it were written out in the patent and delineated in the drawings.*” (Emphasis ours.)

One of the leading cases supporting the Trial Court's view is *Taylor et al. v. Sawyer Spindle Co.*, 75 Fed. 301 (C. C. A. 3) (1896). This case has been consistently followed by all the courts. In this case one of the essential elements, namely, the sleeve whirl, was not set out in the claims and defendant contended that the patent did not define an operative mechanism and was therefore, void. The Court stated at page 309:

“The law on this subject is too well settled to be open for discussion. A patentee is not required to claim the entire machine in each claim. Each of the claims at issue is for a complete combination of the spindle and its supporting tube and devices, and there was no necessity for expressing in terms the devices for revolving the spindle. Any appropriate means for operating it will be understood. The omission of the sleeve whirl does not affect the validity of either one of the claims, which belong to that class where reference may be made to the specifications to supply in a claim what it is plain, to

any one skilled in the art, is a necessary incident. *Reece Buttonhole Mach. Co. v. Globe Buttonhole Mach. Co.*, 10 C. C. A. 194, 61 Fed. 970; *Deering v. Harvester Works*, 155 U. S. 286, 15 Sup. Ct. 118."

In *Canda et al. v. Michigan Malleable Iron Co.* (*supra*), the following language appears and it was held as follows:

"3. The counsel for appellee makes the point that claim 1 does not describe an operative structure, and he contends that, because a casing without a bottom would serve no purpose, and could be put to no use, this claim must fail. But it is erroneous to suppose that because the element, or the combination of elements, in a claim, do not of themselves constitute an operative thing, or one capable of any use, the claim is, therefore, void. No doubt that would be the result, if no useful place for it was known to those familiar with the art, and the inventor himself disclosed no relation in which it would be useful. All that is plain enough. . . . Nobody familiar with the subject could have any doubt from reading this claim, without more, as to the particular thing which the patentee claims as new, or in what relation to other parts, and what other parts, it was designed to be used. Aided by the specification, all doubt is removed as to what the more general statements of the claim mean."

In *Thomson-Houston Electric Co. v. Union Ry. Co.*, 84 Fed. 888 (Cir. Court, N. Y.), a weighted spring was omitted from the claims, the Court nevertheless held the claims valid and stated, page 890:

"A boy seated on the roof of the car could impart the upward pressure, not as economically nor as well

as the weighted spring would, but quite sufficiently to insure the operation of the combination expressed in the claim.”

In *Thomson-Houston Electric Co. v. Black River Traction Co.*, 135 Fed. 759 (C. C. A. 2), the Court stated, page 763:

“If the combination now claimed was new and useful, Van Depoele was entitled to make a claim for it, . . . As the means for doing this are described in the patent, and as at the date of the patent tension devices of various kinds for maintaining the normal relations between the contact device and the overhead conductor were well known in the art, it was unnecessary to specify these means in the claims. . . . The description in the patent of the whole machine, and of the means and mode by which the subcombination is brought into co-operative relation with the other parts, usually indicates how the subcombination may effect a useful result. When this is so, the combination need not be operative alone, because (to use the language of Mr. Walker) ‘utility is justly ascribed to things which have their use in co-operating with other things to perform a useful work’.” (Citing *Taylor v. Sawyer Spindle Co.*, *supra*.)

Attention is also directed to *Kenney Mfg. Co. v. J. L. Mott Iron Works*, 137 Fed. 431 (Cir. Court, N. Y.), the Court stated, at 432:

“. . . If the claim shows a combination of parts forming a workable device when attached to a structure for which it is evidently intended, it is enough. *Taylor v. Sawyer Spindle Co.*, 75 Fed. 301, 309,

22 C. C. A. 203. The engineer's brake valve is inoperative until connected with the air system of the train, but any one skilled in the art would know at once how to make such connection. The question is whether the combination of the claim, if in other respects patentable, can be used, without material changes, in other water-closet systems?"

In *Wright Co. v. Herring-Curtiss Co., et al.*, 204 Fed. 597, the Court held, page 607:

"(3) There was much discussion at the bar as to claim 3, which does not include the vertical rudder as an element. The important feature thereof is that the lateral marginal portions of the planes must be capable of movement to different angles relatively to the normal plane of the aeroplane and about an axis transverse to the line of flight; the purpose of said movements being to present to the atmosphere different angles of incidence. It was argued that without the co-operation of the vertical rudder the claim was wholly impracticable. . . . It is not essential to the validity of claim 3 that all parts of the machine, or all parts specified in other claims, which are necessary to its operativeness, should be included therein, and resort must be had to the specification for a disclosure of the parts necessary to insure the practicability of a patented device. (Citing *Thomas-Houston Electric Co. v. Black River Traction Co.*, 135 Fed. 759, 68 C. C. A. 461; *Deering v. Winona Harvester Works*, 155 U. S. 286, 15 Sup. Ct. 1187, 39 L. Ed. 153; *Taylor et al. v. Sawyer Spindle Co.*, 75 Fed. 301, 22 C. C. A. 203.)

“However, the specification and drawings of a patent may be referred to as an aid in construing a claim and a claim in a patent should be construed liberally so as to uphold and not destroy the right of the inventor,” (*Harman v. Scott*, 90 Fed. Supp. 486, at 492, citing *Temco Electric Motor Co. v. Apco Mfg. Co.*, 275 U. S. 319, 48 Sup. Ct. 170, 72 L. Ed. 298.)

To carry out appellants’ contention as to what a claim should contain would require each claim to be a complete specification within itself, opening wide the door for those who desire to appropriate the essence of the invention. For example, if it was necessary to require the patentee to state how thin the walls of the projectile shell were, as appellants contend, and such dimension was stated in the claim, anyone desiring to appropriate the invention could copy all of the essential elements of the invention and avoid infringement by utilizing a thinner wall, by employing a later discovered more sturdy metal alloy. Furthermore if the patentee was compelled to state the kind and the amount of powder to be used, those desiring to appropriate the essential elements of the invention could readily do so if he use a different quantity of a newly discovered high powered powder. Appellants cannot excuse their infringement based on inspecificity of the claim. It appropriated exactly what is shown in the patent in suit. Obviously someone skilled in the art was able to duplicate, for appellants, the patented invention as evidenced by the Chinese copy Plaintiff’s Exhibit 25.

Further Answering Appellants' Brief.

Under the heading "No Presumption of Validity Attaches to the Patent in Suit" in appellants' brief, appellants refer to the District Court of Maryland's decision in which the Court stated: "It is in no sense a pioneer patent." *The appellants failed to state that the Court there held that the patent was valid.* It was held not infringed. What is and what is not a pioneer patent, is always open to argument. The present invention discloses the first successful hand-held pistol-fired parachute type of flare for life boats.

Appellants also refer to the language of the Court of Appeals in stating "The validity of the patent is not free from doubt, but the question need not be decided here; . . ." The fact is that that Court did not hold the patent invalid and no patent ever issued which was free from doubt as to the validity.

The statement based on the fact that the Patent Office issued the patent through inadvertence, based on the ground that the Patent Office did not cite certain patents is merely argument. The Patent Office merely cites those references which are deemed to be the most pertinent. Although the Patent Office did not cite Exhibits F-III and F-XII and F-XXI which show a one-piece cartridge case having a percussion cap in the head thereof, it cited Exhibit F-IV which also shows a one-piece projectile shell with a percussion cap in the head thereof. The Patent Office did not cite Exhibits F-VIII and F-XIII for the reason that they have no pertinency whatsoever, and appellant has not indicated wherein they deemed they were of any pertinency. Although the Patent Office did not cite Exhibits F-XVI, F-XVII and F-XVIII, which

relates to parachute flares, it nevertheless cited Exhibit F-XXII and Exhibit F-XXIII which it correctly deemed was more pertinent than Exhibits F-XVI, F-XVII and F-XVIII.

Although the Patent Office did not cite the Exhibit F-XIX, it cited more pertinent references Exhibits F-XXII and F-XXIII. Exhibit F-XIX is not a pistol operated flare. It is an inexpensive aerial toy which is bottomed on the earth or platform. It employs a two-piece projectile shell and, therefore, the recoil of the explosion to lift the toy to 150 feet is much greater than that which could be withstood when pistol-fired. Although the Patent Office did not cite Exhibit F-XXVII, it cited, what it rightfully deemed more pertinent, references Exhibits F-XXII and F-XXIII.

The decisions cited by appellants to support their contention that the patent was issued through inadvertence, cannot be applied in the instant case *since those references*, cited by appellants in addition to those cited by the Patent Office, *are far less pertinent than those cited by the Patent Office.*

Under the heading in appellants' brief "The Evidence in This Case Compels Judgment of Invalidity," the illustration in plate 1, opposite page 12, is *not* shown in any of the references of record. *The illustration on plate 1 is merely a composition of various parts taken from various patents.*

"Prior patents 'cannot be reconstructed in the light of the invention in suit, and then used as a part of the prior art.'" *Payne Furnace and Supply Co. Inc. v. Williams-Wallace Co., supra*, citing *Mohr and Son v. Alliance Security Company*, C. C. A. 9, 14 F. 2d 799, 800.

Under the heading "Plaintiff's Admissions Compel Holding Claims 10 and 11 Invalid" and the plates appearing opposite page 18 of appellants' brief, merely show that appellee admitted that certain elements of the combination were old. There is no admission on behalf of appellee either under the many sets of requests for admissions and the proceedings before the Trial Court to the effect that the combinations shown in plate 2 are shown in the prior art.

Appellants, before Your Honors, like before the Trial Court had been endeavoring to confuse the issue by continuously harping on admissions made by appellee and by continuously insisting that a new element must be present in a new combination of old elements. Appellee has always maintained that claims 10 and 11 define a new combination of elements which produce a new and better result.

The argument starting on page 32, of appellants' brief together with the plates facing this page, are injected, it is believed, merely to further endeavor to confuse the issue before the Court. It will be observed that these plates VI, VII and VIII, each shows a cartridge case. What is more important, the projectile shell (which is not cross-hatched in these plates), is formed of a separate tube and a separate base. Claims 10 and 11 are not directed to a specific element but are directed to a combination of elements, one of which includes a one-piece projectile shell.

As Your Honors know, the Patent Office meticulously guards the public in its issuance of patents. The skilled Examiner must be satisfied with the language employed in the claims. Appellants cited rejected claim 38. The cancellation of a claim is not an admission that the

claim does not express invention. Such claim is cancelled without prejudice, particularly when other claims define the invention more clearly. Moreover claim 38 was not limited to a one-piece projectile shell having a *thin* side wall and a relatively *thicker* base. Nor did it specifically define a "flare," and it did not include the "means to prevent the collapse of the parachute."

Further as to Utility.

The bold type used by appellants "Plaintiff Cannot Point to a New Result. The Old Combination Is Invalid." cannot overcome the unrefuted testimony of Dr. Clauser and Mr. Hubbell to the effect that this was the first successful hand-held, pistol-fired, parachute flare, distress signal. The burden of showing lack of the utility of the invention rests upon the infringer, particularly when he makes exact copy of patented structure. Not one piece of evidence was offered to show that any of the prior art performed the result achieved by the patented invention, obviously for the reason that the prior art could not perform the function. The remark on the part of appellants alleging that Dr. Clauser "attempted to dramatize the trial by creating the impression that the patent relates to a combination of a sinking ship, a life raft, a parachute flare, and a rescue vessel 25 miles away," would have, it is believed, an entirely different effect than facetiousness, if one's life is in danger. Such remark can be readily made while sitting at one's desk. "Knowledge after the event is always easy, and, problems once solved present no difficulties, indeed, may be represented as never having had any, . . ." (*Diamond Rubber Co. v. Consolidated Rubber Co., supra.*) If one had to be shipwrecked and had a choice to choose the time,

would he choose the time when the industry was striving to perfect a successful flare and had a choice of the torch flare or flares like those in the prior art, or would he choose the time when each life boat was equipped with appellants' flare Exhibit 25, copied from the patent in suit.

The answer to the industry's problem was not solved by the toy Exhibit F-XIV. True the toy shot into the air 150 feet, but it was a toy; the projectile shell was formed of two pieces of material; what difference did it make if it leaked fire from the propelling charge in the cartridge case to the black powder in the projectile shell; such was considered merely a dud piece of firework display. The toy was not held in the hand. It was bottomed on something solid. The problem of recoil was nonexistent. The real answer for which the industry strove was not answered by this toy.

Appellants charge Appellee with frantic effort to salvage claims 10 and 11, alleging there was no novelty defined by the claims, causing delay and confusion of the Trial Court. The Trial Court clearly understood Appellee's position [R. 337].

"The Court: We get down to this patent in suit, and the plaintiff claims a combination of entirely old elements in a way so as to produce a new result. *Let's take it from the basis of the combination described in their claims 8, 10 and 11, which Mr. Schmieding mentioned this morning.* Let me put it this way: the combination appears to be useful and new as a combination in this field. Would you concede those two elements?" (Emphasis ours.)

Appellants Attempt to Evade Issue.

Appellants, before the Trial Court and as it continues to do before this Court, attempts to *evade this issue* of old elements producing a new result and continuously resorts to attempt to confuse the issue by injecting the necessity of a new element. In reply to the Court's question, above quoted, the following appears:

“Mr. Miketta: No, your Honor, and I will get to the answer to your question, but let me first call your attention to this: We are talking about a new element in this discussion, and I think that is a wrong approach, and perhaps that language is confusing.

The Court: *I am not considering any new elements; I am considering old elements in a new combination.*

* * * * *

The Court: There is no question but what this is a better device than anything that had been used theretofore? Is there any question about that?

Mr. Miketta: *It is a better device because they made this out of one piece.*

The Court: Yes, and the defendant has paid it the tribute of copying it.

Mr. Miketta: Certainly, any mechanic would know that.

The Court: Now, there is a question. Now, let's get down to a fine point. There was a storage battery before Ray-O-Vac, it worked; what did the patentee do there?

Mr. Miketta: He did not make an old element that formerly was made in two pieces out of one piece, your Honor; and that is your specific problem here.

The Court: He took some old elements and put them in a new combination, didn't he, and what was the new combination?

Mr. Miketta: Let's stick to the facts of this case, your Honor. Here we have an old projectile case made out of two pieces, and these people came along and made it out of one piece.

The Court: All right. Now, will you distinguish that for me, show me why that is not analogous to what was done in the battery case, Ray-O-Vac?

* * * * *

The Court: Mr. Miketta, is it your belief from the evidence here that the court should find that flares taught in the prior art can be shot at sea just as effectively and can be seen just as well with the same results as with this metallic cartridge?

Mr. Miketta: Yes, your Honor.

The Court: Is there anything here to show that? Isn't all the testimony to the contrary?" (Emphasis ours.)

At this point we wish to call your Honors' attention to the fact that *no evidence whatsoever was introduced to show that the prior art could perform the function of the patented structure for the simple reason that the prior art could not.* Appellants could not answer the Trial Court's question and merely stated:

"Mr. Miketta: Has your Honor any evidence to show—

The Court: Dr. Clauser testified that—

Mr. Miketta: I have read his testimony very carefully, your Honor, and I don't find that. He is a witness that has been with the plaintiff for a long time, yes, but why didn't they produce some tests, your

Honor? Why didn't they show it? What is good proof? What is evidence? Suppose it is cheaper, your Honor, does that make it an invention, just because it is cheaper? I would say not. There must be a new relationship between the elements, a new mode of operation."

The Court then states [R. 340]:

"The Court: If this is not the best known to the art, why would competition come along and instead of offering something better just copy what was there? Isn't that tribute itself a compliment?

"Mr. Miketta: It isn't a tribute to invention; *it is a tribute to commercial success*, perhaps. (Emphasis ours.)

The Court: Isn't it a compliment, a tribute to the contention or concession to the contention that this represents the most advanced and most improved state of the art?

Mr. Miketta: If we eliminate from our thoughts actual invention, perhaps it is, perhaps it is. Perhaps this is a very fine shell. It must be. It passes the specifications. The government seems to be happy with it.

The Court: And it must be a better shell or better flare than anything theretofore known to the art.

Mr. Miketta: I wouldn't say that, your Honor.

The Court: Why wouldn't the Coast Guard specify something as an alternative, perhaps, something known in the prior art?

Mr. Miketta: There are reasons. In the first place, they may not have anybody engaged in this business. Plaintiff here may have put everybody else out of business anyway."

Why appellants should make such statements is not understood. It will be recalled that in the case of *Kilgore v. Triumph*, the two-piece projectile shell was held not to infringe.

The Court further stated [R. 359]:

“What comment do you have to make, Mr. Miketta, on the long period of time that this problem had apparently existed without being solved?

Mr. Miketta: That, I think, is a lot of hokum for the simple reason . . . and that is indelicate language, your Honor . . . but frankly, this patent F-18 was involved in litigation before, and they made some representations during the trial of that case that this patent F-18, now expired, was the answer to the maiden's prayer. I have never seen an inventor who did not make that contention.

The Court: You and I do not have much difficulty, do we, in perceiving that there was a need for these purposes, for this sort of a device, and after all, we wonder why it was not thought of before, don't we? Aren't you surprised in view of this state of the art that this type of flare was not produced many, many years ago?

Mr. Miketta: I think it was produced, your Honor. The only reason that until the Coast Guard started actually setting forth specifications that a flare must go up to 150 feet to be useful, and caused all of the manufacturers to put in enough power so that it went up that high, and imposed a restriction on them that the candle power must be to a certain standard, there probably were manufacturers who had flares that went up as high, but perhaps they did not burn as brightly.”

There is no evidence whatsoever to support Mr. Miketta's (Counsel) statements.

"The Court: There isn't anything in the prior are to show that, is there? What I have in mind is this: The curvature of the earth has not changed.

Mr. Miketta: No.

The Court: So the need for a certain altitude to give a signal at sea has not changed.

Mr. Miketta: That is right.

The Court: And we have known the use of projectiles for many, many years and the means to project them. We have known the use of flares and even, I suppose, the parachute flares a good many years. Doesn't it seem strange that this need was not met sometime long before it was?

Mr. Miketta: Your Honor, remember this: This F-18 definitely states that it is to be projected a sufficient distance from any station afloat, or ashore. Now, this old expired patent said that the projectile was to be projected a sufficient distance from any station afloat, or ashore. The pistol—

The Court: To do what?

Mr. Miketta: Pardon?

The Court: In order to accomplish what?

Mr. Miketta: Well, this was a signaling, in order to signal properly, otherwise what function? The whole device is signaling.

The Court: It would not accomplish anything like the result that your client's flares, for example, accomplish today, would it?

Mr. Miketta: I don't know. Why shouldn't it if you put in the right flare composition into that F-18 device, and you put in a sufficiently large cartridge in the bottom, that thing will go up and it will

open because it even includes a stick that will prevent the parachute from collapsing.

The Court: *Oh, it will go up if it doesn't go to pieces.* (Emphasis ours.)

Mr. Miketta: Oh, they sold a lot of these things, your Honor, and they were satisfactory. They actually made them.

The Court: Were they satisfactory for present day service?

Mr. Miketta: Well, we are not studying or we are not judging the patent by government specifications.

The Court: Could they be projected to any such height?

Mr. Miketta: Yes, sir.

The Court: They could be?

Mr. Miketta: Why certainly they would go up that high. Remember this little gimmick that is patent F-21, I think—no. Well, it is just almost a toy but it is supposed to go up 150 feet in the air. That is F-19.

The Court: You do not think the device taught by the patent in suit even produced a better result?

Mr. Miketta: Every inventor claims he has a better result, your Honor.

The Court: I am asking you what you think about it.

Mr. Miketta: No, because you can make a device and not put in the right flare composition and you certainly won't have a better result, your Honor. You may not have any result. You can take the patent in suit, build a device exactly like the specifications call for, and it will not burn for a length of time sufficient to be even worth while as a signal. And if you take the claims, your Honor, a lot of claims do

not even say that you have to have a thick base and thin side walls. They do not teach you how to build a better flare. Of course, every patentee, every inventor claims that he has made an improvement.

The Court: Oh, yes.

Mr. Miketta: But this is not an inventive improvement. There is no invention in substituting a one-piece shell for a two-piece shell.

The Court: I would not have any trouble holding with you if I could just get this Ray-O-Vac case disposed of in some way.

Mr. Miketta: There was more than substitution in that case, your Honor. You will grant me that they at least turned the outer edges, but here it is nothing but substitution.

The Court: The cardboard containers sometimes have bottoms on them, don't they?

Mr. Miketta: That is right, but they don't crimp into. You see, when you take that outer cylinder—I don't know what I would do if I did not have hands—but if your Honor imagines that this is the upper edge of the cylinder and this is the bottom edge of that outside cylinder, and you turn those edges in against the upper and lower seals, then you have a clamping action there. You not only prevent that liquid from going upwardly, but you also bring them together. Now, paper would not do that. You can roll the edge of the paper, and they do roll the edge of the paper, but that is only as a decorative feature, almost, to prevent fraying, but it does not clamp down into the end seals and seal the liquid, preventing it from end movement. There is a difference there, your Honor.

Mr. Schmieding: With respect to F-18, your Honor, I call your attention to line 9 in column 1 of page 1, where the idea is to project a short but sufficient distance from the airplane. As Dr. Clauser testified, that is what this particular shell was made for.

Now, also, on page 2, column 1, line 39, the sentence starting there:

‘In the operation of the device, the initial velocity of the container B, after leaving the gun, will be comparatively small, * * *.’

Now, that is true, as Mr. Miketta stated. You can place a powder in there to lift that projectile up to the desired height. But, can you hold it in your hand? And if it can be done, why does defendant not make the expired apparatus instead of copying exactly the patent in suit?

The Court: *Isn't our question here probably this: Whether the result produced was so far superior to the result produced by any other combination as to be in effect a new result?* (Emphasis ours.)

Mr. Schmieding: That is right, your Honor. That is right. It is something that they have been striving for and never solved until these men conceived of this simple idea.”

The foregoing is a summary of the Trial Court's understanding of the invention, clearly showing that the combination of elements produced a new and useful result, clearly showing that appellants paid tribute to the invention, clearly showing that appellants could not distinguish the instant cause of action from the case of *Ray-O-Vac v. Goodyear*, and clearly showing that the Trial Court was not confused by appellants' conjured defense.

In order to attempt to justify their “conscious, deliberate and willful” infringement, appellants lifted excerpts from many decisions, none of which apply to the facts in the instant case.

In the case of the *Great Atlantic and Pacific Tea Company v. Supermarket Equipment Corporation*, the Supreme Court stated:

“Neither court below has made any finding that old elements which made up this device perform any additional or different function in the combination than they perform out of it. This counter does what a store counter always has done—it supports merchandise at a convenient height while the customer makes his purchases and the merchant his sales. The three sided rack will draw or push goods put within it from one place to another—just what any such a rack would do on any smooth surface—and the guide rails keep it from falling or sliding off from the counter, as guide rails have ever done. Two and two have been added together, and still they make only four.”

In the instant case under consideration, we do not add up to four, but we have produced the first successful distress signal for life boats. The court in the *A. and P.* case also states:

“ . . . when the whole in some way exceeds the sum of its parts is the accumulation of old devices patentable.”

Applicants copy an excerpt from *Bailey v. Sears, Roebuck & Company* (cited by appellants). The Court, however, stated in that case “*There was no new function performed by the combination. The function performed was*

merely to indicate the location of rotor blades, as in prior devices. Hence it was not patentable as a combination of old elements.” (Emphasis ours.)

In the case of *Goodman v. Hawkinson* (cited by appellants) the patent was directed to a method of retreading worn tire casings. This method involved three steps. Each of these steps in itself was old and the Court there held: “. . . the combination of these old steps used to retread a tire *did not result in a new product*” (emphasis ours). The Court here sanctioned the doctrine that the combining of old elements in a new combination, producing a new result, is entitled to the benefits of the invention,

“. . . notwithstanding the use by him of elements which were old in the art. This position is perfectly tenable provided the combination is new and that a new and useful result has been obtained. This argument is met by the proposition that no new result is attained by the patentee. The same result which is obtained as a by-product of his invention had also been attained by prior inventors.”

In the case of *Magarian v. Detroit Products Co.* (cited by appellants), the Court merely recited the well known doctrine that:

“If they (elements) are all found in different prior patents and *no new functional relationship arises* from the combination, the claim cannot be sustained” (emphasis ours).

The Court there merely held that

“The combining of old elements does not rise to the dignity of invention unless a new result is produced or unless an old function is performed in a new way.”

The Ninth Circuit has never overruled the doctrine that a combination of old elements which produce a new result is patentable.

The same is true with respect to *Mettler v. Peabody Engineering Corporation* (cited by appellants). There the Court held,

“Hence, we have merely a combination of a number of old elements *producing the same result* produced by the prior burners . . .” (Emphasis ours.)

In the case of *Grinnell Washing Mach. Co. v. Johnson Co.* (cited by appellants), the Court stated:

“Confessedly all the elements of the Phillips patent are old. The merits of the combination, which, it is contended, involve invention and validate the patent, are that this gearing device, applied and operated as specified, enables the washing of a part of the clothes to be performed at the same time that the wringing process is being applied to other clothes . . . In the gearing specified every element is old. The operations of the wringer and the washing machine, although simultaneous, are independent one of the other. The control of the operation of the wringer is by an old and well-known method. From the co-operation of the elements, here brought together *no new result*, involving the exercise of the creative faculty which is invention, is achieved. . . . To borrow an illustration made at the argument, we think the Phillips aggregation of elements may be likened to the operation of a number of different machines in a factory by power applied from the same line shaft, each operation contributing its separate part to the production of a given result.” (Emphasis ours.)

That case like the *Great Atlantic and Pacific Tea Company* case, the result of the two elements added up to four, and therefore the case is not pertinent to the instant case wherein a new and useful result is achieved.

In the case of *General Electric Company v. Yost Electric Co.* (cited by appellants), the patent under consideration was a one-piece lining. The Trial Court found that “device consisted merely of making in one-piece that which was formerly made in two parts, *and performs no new function.*” (Emphasis ours.) The Court of Appeals also found that there was no new function performed by the one-piece lining. It stated:

“This was not new, because old one-piece lining effected the *same results in the same way*, the only difference being one of shape.” (Emphasis ours.)

On page 40 of appellants’ brief, appellants state “Plaintiff is challenged to point out wherein the old elements of the old combination described in claims 10 and 11 produce a ‘new or different function or operation than that theretofore performed or produced by them,’ ” and then cites as authority *Lincoln Engineering Co. v. Stewart-Warner Corp.*; *Cuno Engineering Corp. v. Automatic Devices Corp.*; *Toledo Pressed Steel Co. v. Standard Parts, Inc.*; and *Great A. & P. Tea Co. v. Supermarket Equipment Corp.* Appellants admitted that the invention had commercial success and that it must be a fine signal [R. 340]. Appellants paid tribute to the invention by making an exact copy of the patented structure.

The case of *Lincoln Engineering v. Stewart-Warner* (cited by appellants), is entirely foreign to the fact in the instant case. In that case the patentee invented a

new chuck. This new chuck performed no new function in the combination employing a compressor which was old in the art. Here the pump functioned the same as always and the chuck functioned as other chucks. Again we have two and two making four. These two elements did not cooperate to perform a new and useful result.

In the case of *Cuno Engineering Corp. v. Automatic Devices Corp.*, the alleged invention was directed to a cordless electric lighter for cigarettes. A thermostatic control automatically cut off the current to the heating coil when the temperature attained the proper temperature. Cordless electric lighters were old and thermostatic controls for interrupting circuits to heaters were old in electric heaters for vulcanizers, flat irons, coffee cookers, bread toasters, etc. In each of these thermostatic controls the circuit was closed manually and interrupted automatically after the heater temperature attained a predetermined value. The patentee in that case applied a well known automatic control to a cordless electric heater coil. The result accomplished by these elements was old. If invention was present, it was not in the combination of the cordless heater and automatic control, but would have been in the specific mechanism for effecting movement of the heater when released.

In the case of *Toledo Pressed Steel Co. v. Standard Parts, Inc.*, cited by appellants, the alleged invention was directed to a torch for burning liquid fuel. A wick receiving tube extended into the container for the fuel and was provided with a particular form of cap which prevented the extinguishment of the flare in all kinds of weather. Prior art showed that this same cap was used

in the same combination in street lamp-lighter's torches. The Court there states:

“As before, the torch continued to produce a luminescent, undulating flame, and the cap continued to let in air for combustion, to protect the flame from wind and rain and to allow it to emerge as a warning signal. *They performed no joint function. Each served as separately it had done.*” (Emphasis ours.)

We have previously discussed the *Great A. & P. Tea Co.* case.

Appellants also cite *Bassick Co. v. Hollingshead Co.* The question there involved was the same as in *Lincoln Co. v. Stewart-Warner Corp.* There as in the *Lincoln v. Stewart-Warner* case, the pump, hose coupling and pin setting and coupler did not cooperate to produce a new and useful result. Each functioned as they always had functioned in the same combination.

Appellants also cite *Lane Wells Co. v. M. O. Johnston Oil Field Service Corporation*. That case falls into the same category as the *A. & P.* case. Your Honors found in that case:

“It is also our conclusion that the Lane device constituted only a bringing together in juxtaposition of old and well known elements; that whatever advantageous results were thus accomplished were not different in character from the aggregate results of the old tools; and that in the Lane device there was lacking that mutuality of action, that joint, cooperative functioning of the old elements to produce a new and different result, which is essential to raise a mere aggregation to the level of a patentable combination.”

Judgment of Trial Court Should Be Sustained.

The evidence clearly shows that the patentee answered a long sought problem, obtained a result that was desired for many decades, and the *Ray-O-Vac v. Goodyear* case is controlling.

From the quotations herein it is obviously apparent that the Trial Court was not confused, as alleged by appellants, although appellants tried desperately to confuse the Court when the Court was rendering his opinion at the close of the trial. His Honor understood the problem facing the industry at the time that the invention was made. He appreciated the new result was obtained by the construction of the patent in suit. He clearly understood the prior art as presented by Mr. Miketta, as is evident from the record, pages 313-324. He was not misled by appellants' attempt to inject the doctrine, that a new element must be presented in an old combination. He fully appreciated plaintiff-appellee's willing admissions that elements of the combination were old, and fully understood plaintiff-appellee's position that although these elements were old, the combination of the same, produced new results that were patentable.

The Trial Court found, as the evidence shows, that muzzle-loading cartridge cases and breach-loading cartridge cases are, by law and fact, the equivalent of one another. He found that claims 10 and 11 are valid and infringed and that the infringement was conscious, deliberate and willful. The Court properly awarded costs.

It is no defense to state as appellants do, that the action was not brought in good faith and then refer to the *Triumph Explosives, Inc. v. Kilgore Mfg. Co.*, since in that suit the patent was declared valid.

Appellants' attempt to smear appellee's presentation of the case by saying that plaintiff first accused defendants of infringing all 23 claims, caused defendants to prepare their defense accordingly, and then reduced the claims piecemeal, is entirely unwarranted. Appellants do not substantiate this remark in their brief and cannot. Appellants never charged infringement of all 23 claims. More than a month before appellants filed their Answer, they were notified that appellee would rely upon claims 1 to 11 and 15 to 16. More than two years prior to the trial of the case, appellee withdrew claims 6, 15 and 16 from the charge of infringement. On the other hand, more than a year after the Bill of Complaint was filed, and after appellants were aware of the fact that appellee was going to rely only on claims 1 to 5 and 7 to 11 inclusive, appellants filed an Amended Answer setting up 17 additional references, many of which were foreign patents, citing a total of 40 references, thus increasing appellee's expenses in the preparation of the trial.

Appellee denies appellants' statements that plaintiff admitted that claims such as 1 were anticipated by Exhibit F-3. We merely agreed with the Court that the claim is broad but maintained that when the claim is read in the light of the four corners of the patent, it is directed to a projectile shell and therefore not anticipated by Exhibit F-3.

Appellants in their brief endeavor to make it appear that appellee, for the first time, at the end of the trial, voluntarily admitted that claims 6 and 12 to 23 were not infringed. The facts are that the question of infringement of claims 6 and 12 to 23 were not in issue except as to appellants' counterclaim and no evidence was ever introduced to show infringement of said claims.

With respect to appellants' statement that appellee admitted that claims 7 and 8 were invalid, a careful reading of the text shows that the Trial Court had reasons for holding claims 1, 2, 3, 4 and 5 invalid and we admitted only that if that same reasoning of the Court is applied to claims 7 and 8, then the Court should hold claims 7 and 8 invalid.

Appellants should not complain on the admission by appellee that claims 6 and 12 to 23 were invalid. Appellants brought on the question of validity of these claims, since they were not charged to be infringed at the time that appellants filed its counterclaim. Appellee was no longer interested in whether or not anyone else was infringing these claims, since the patent was about to expire. Appellants and appellee were the only manufacturers of the structure. Appellants were the only infringers [R. 112]. We merely desired to assist the Trial Court in disposing of the counterclaim which was brought merely for the purpose of harassing the appellee. We state: "We admit for simplicity that claims 12 to 23 are invalid, if that will clear up this matter." The same reasoning went with respect to claim 6.

Appellee, by its admissions, willingly admitted that elements of the combination were old, but always steadily maintained that the combination of these old elements produced a new and patentable result. Counsel for appellee knew the import of plaintiff's admission, and therefore the appellants' suggestion of the necessity of questioning such counsel's ability is beside the point.

We deny that appellee at any time attempted to repudiate its admission or engage in evasive or dilatory tactics.

We deny that we took unnecessary depositions in Ohio. We deemed that the depositions of Messrs. Long, Hubbard and Hatch were necessary. One count in the Bill of Complaint included unfair competition and we desired to show the Trial Court that we could perform the same result with shells which look entirely different than appellants' shell [R. 245]. The Trial Court requested that the experts shoot off these shells that met the government specifications, and that the experts "can come in to tell the Court—and tell us what the results of the tests were" [R. 246 and R. 247]. For that purpose we took the depositions of Mr. Long, Messrs. Hubbard's, Hatch's and Long's depositions were read into the record.

We challenge appellants' accusations of our "baseless assertions," our disregard "of the rules of the Court," our "evasive answers and our silly contentions." Appellants' accusations in its brief, are untenable. No designation to the record is made in their brief to substantiate their accusations.

We deny the allegation, made by appellants that we used confusing tactics and that our acts confused the Trial Court. We maintain that appellants endeavored to confuse the Trial Court in its attempt to misapply our admissions.

At this point it is believed advisable to inform Your Honors that the quoted section, on page 26 of appellants' brief, directed to 299 U. S. 98, is not an affirmation of the quoted part of the case of *Ray-O-Vac v. Goodyear*.

Trial Court Twice Adjudged Claims 10 and 11 Valid and Infringed.

After deciding from the bench, on November 3, 1950, that claims 10 and 11 were valid and infringed, appellants asked for the privilege of petitioning for a rehearing as to those claims [R. 348]. The Trial Court then repeated [R. 349]:

“The Court: Fairly construed I think those claims described the combination and all the essential elements of it with sufficient specificity to enable anyone versed in the art to practice that invention.

If you wish to make a motion for a new trial and point out any errors—

Mr. Miketta: I will consider that, your Honor.

The Court: I will be glad to entertain it. Or if you wish to argue the matter upon objections of the findings, you may present it that way.

Mr. Miketta: That may be the time to do it.

The Court: I will be glad to entertain it. We have it down to fine points now, and perhaps that might enable you to make a more helpful presentation. You may present your objections and any argument on it . . .”

Briefs were filed. Appellants requested a rehearing [R. 60]. The judgment of November 3, 1950, was vacated and the case was placed on the calendar for further oral argument [R. 240]. The Trial Court heard further argument of both parties on January 8, 1951; the Trial Court, upon reconsideration again on January 31, 1951, held claims 10 and 11 valid and infringed [R. 72].

Summary and Conclusion.

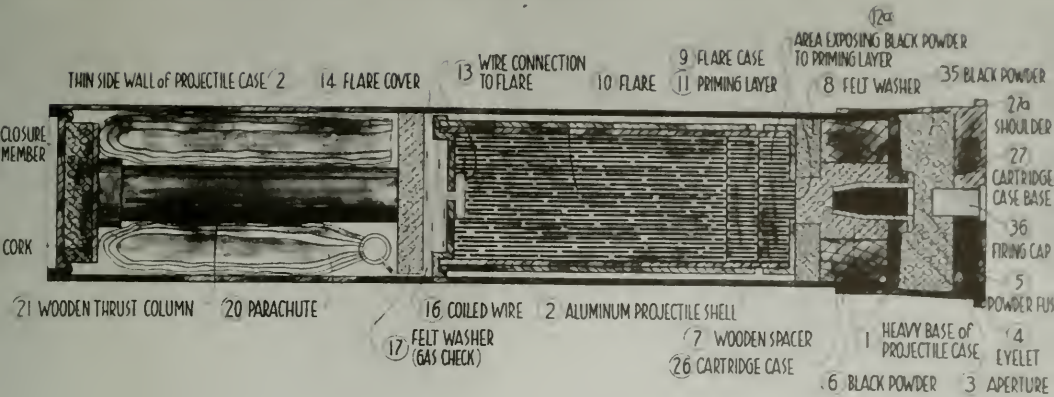
The record establishes that the Trial Court did not err in finding either time that the inventors: “produced a new combination of old elements which together produced a better result than anything previously known to the art” [R. 67]. That the invention “answered a long existing need which had not been answered by the prior art, and met with commercial success.” That “signal flares made in accordance with the patent in suit were the first successful distress signals which could be fired from a hand-held pistol and could be seen from a distance of 25 to 30 miles when shot by an occupant of a life boat” [R. 68]. That appellants’ flare “as exemplified by Exhibits 2 and 25 perform the same work in the same way by substantially the same structure defined by claims 10 and 11 of the patent in suit.” That appellants “manufacture and sell flares in violation of claims 10 and 11 of the patent in suit and thereby infringe said patent. The infringement by defendants has been and is conscious, deliberate and willful.” That claims 10 and 11 of the patent in suit “describe the combination and all essential elements of it with sufficient specificity and are valid and infringed” [R. 70].

Dated at Los Angeles, California, this 24th day of August, 1951.

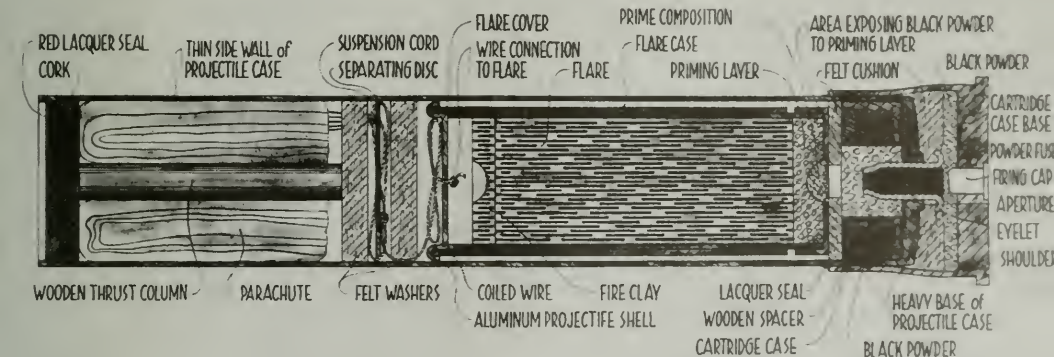
Respectfully submitted,

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PATENT 1,947,834



KILGORE



SIGNAL

